FIG. 1

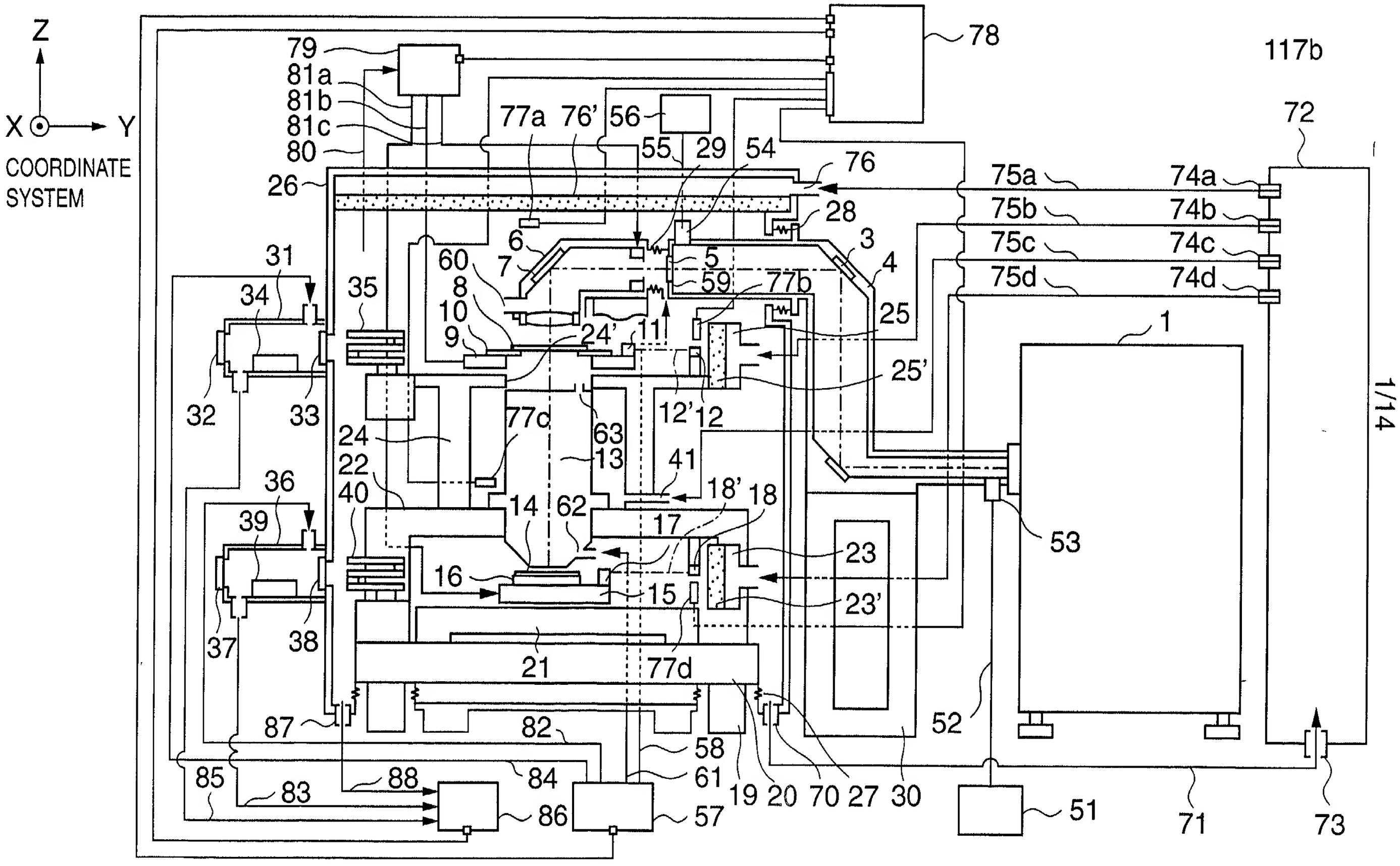

Z
X
Y
COORDINATE SYSTEM
78
79
81a
81b
81c
80
26
77a
76'
56
55
29
54
76
28
6
7
60
8
10
9
5
59
77b
3
4
25
25'
24'
11
31
34
35
1
32
33
24
22
40
77c
63
13
12'
12
41
18'
18
14
62
17
39
36
16
15
23
23'
37
38
21
77d
87
82
58
61
85
83
88
84
86
57
19
20
70
27
30
51
52
53
71
73
117b
72
75a
75b
75c
75d
74a
74b
74c
74d
1
1/14

FIG. 2

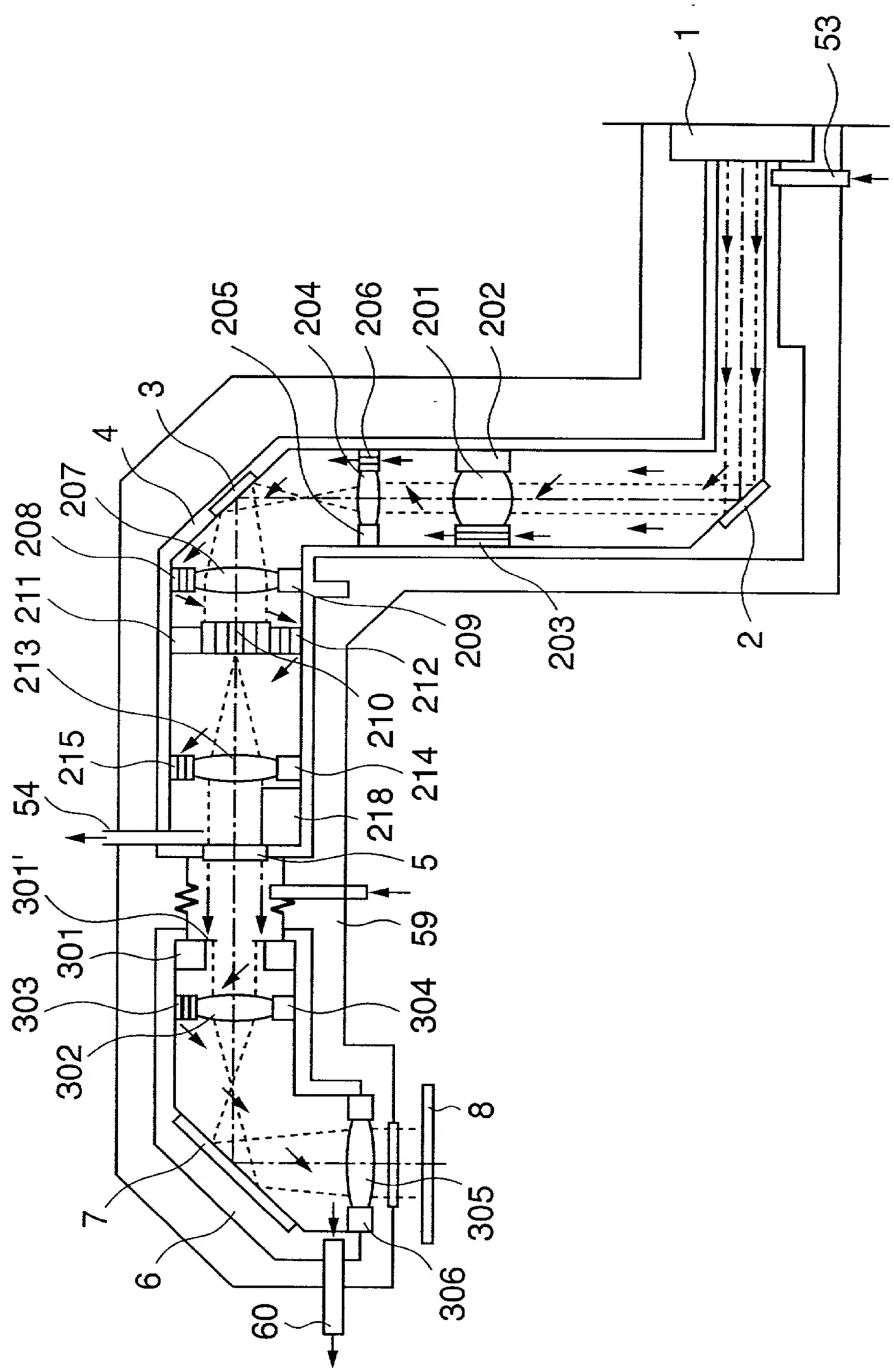

1
53
205
204
206
201
202
3
4
207
208
213
211
209
203
2
212
210
214
215
54
218
5
301'
59
301
303
304
302
8
7
305
6
306
60

FIG. 3

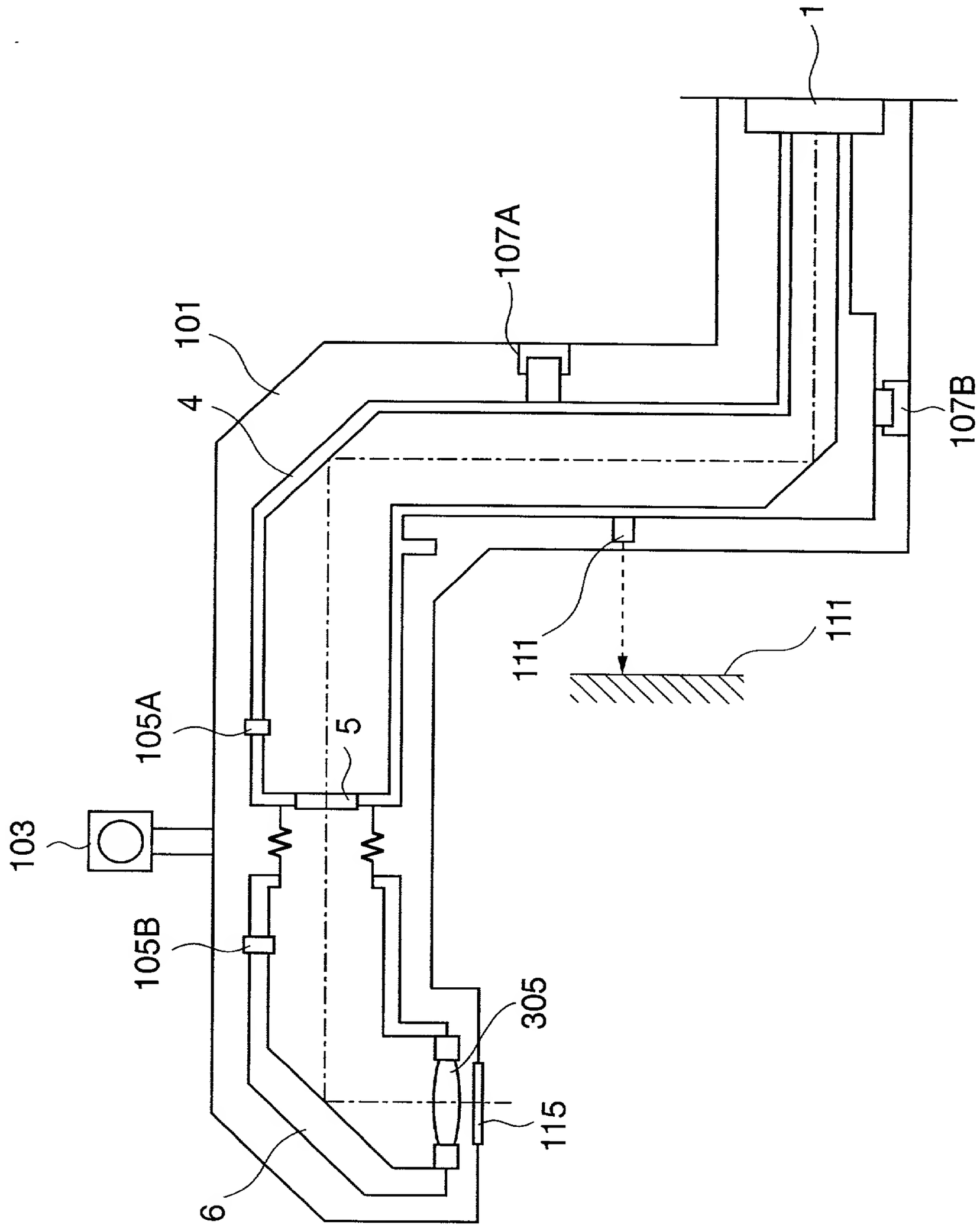


FIG. 4

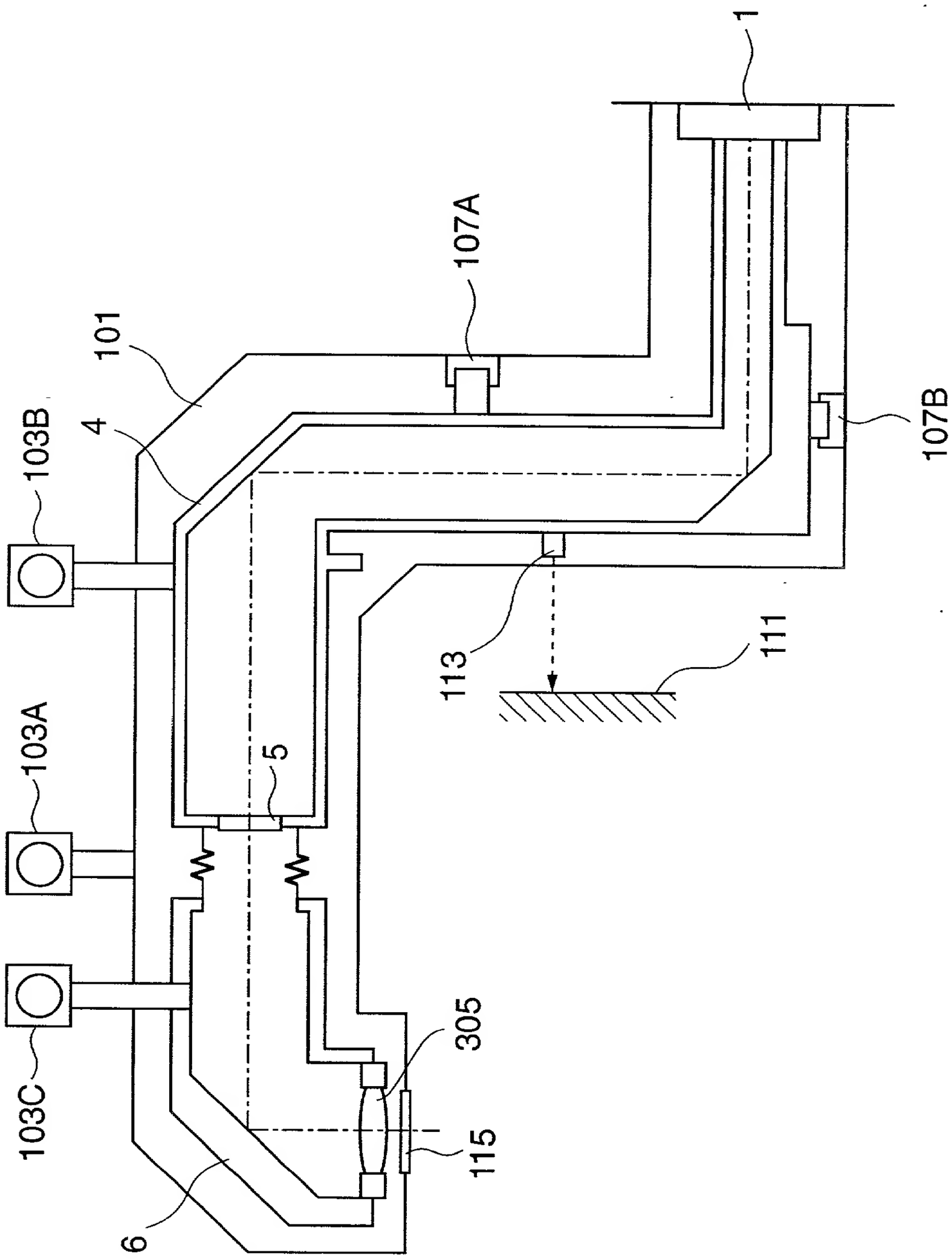
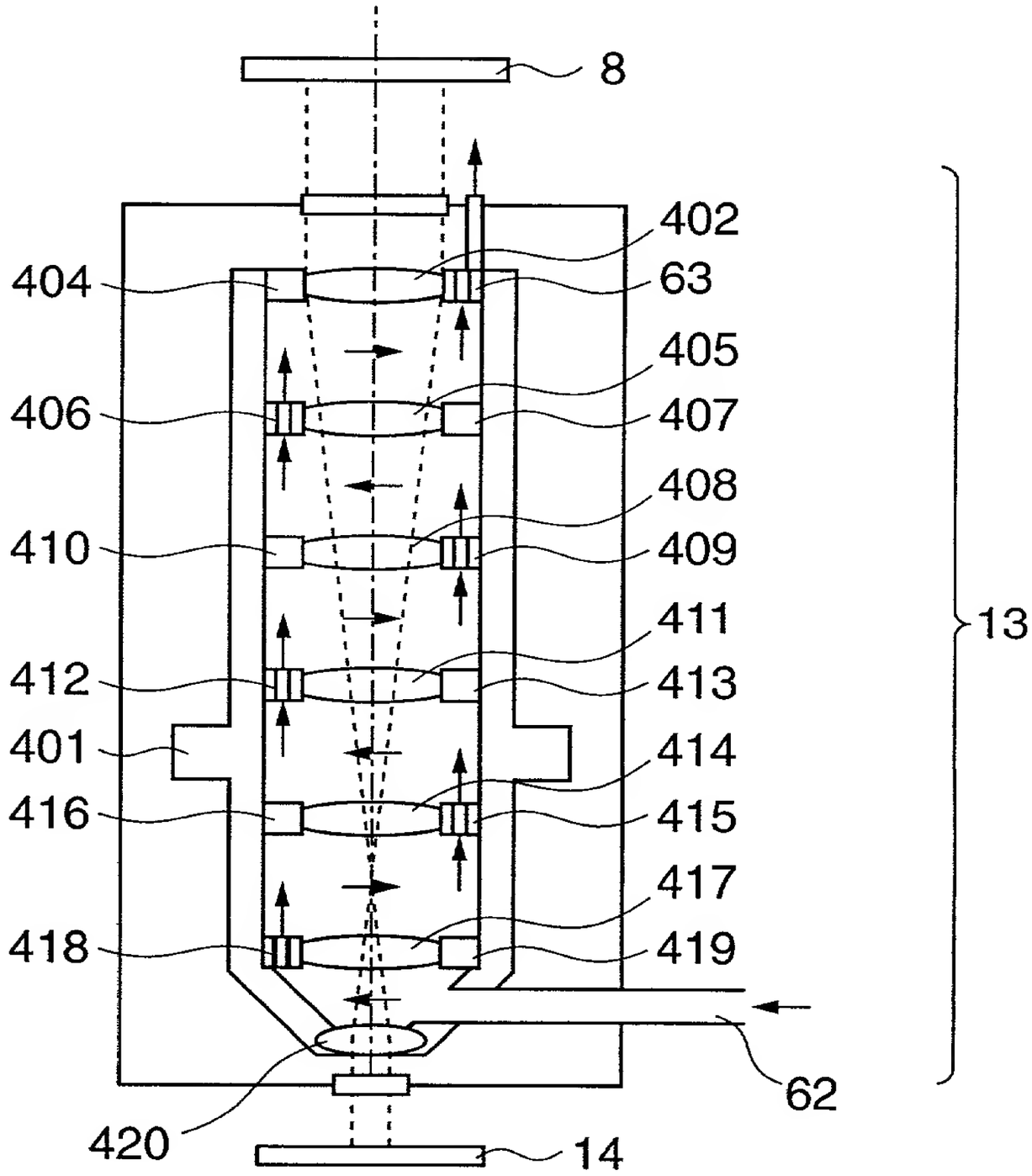


FIG. 5


8
402
404
63
405
406
407
408
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409
411
412
413
401
414
416
415
417
418
419
13
62
420
14

FIG. 6

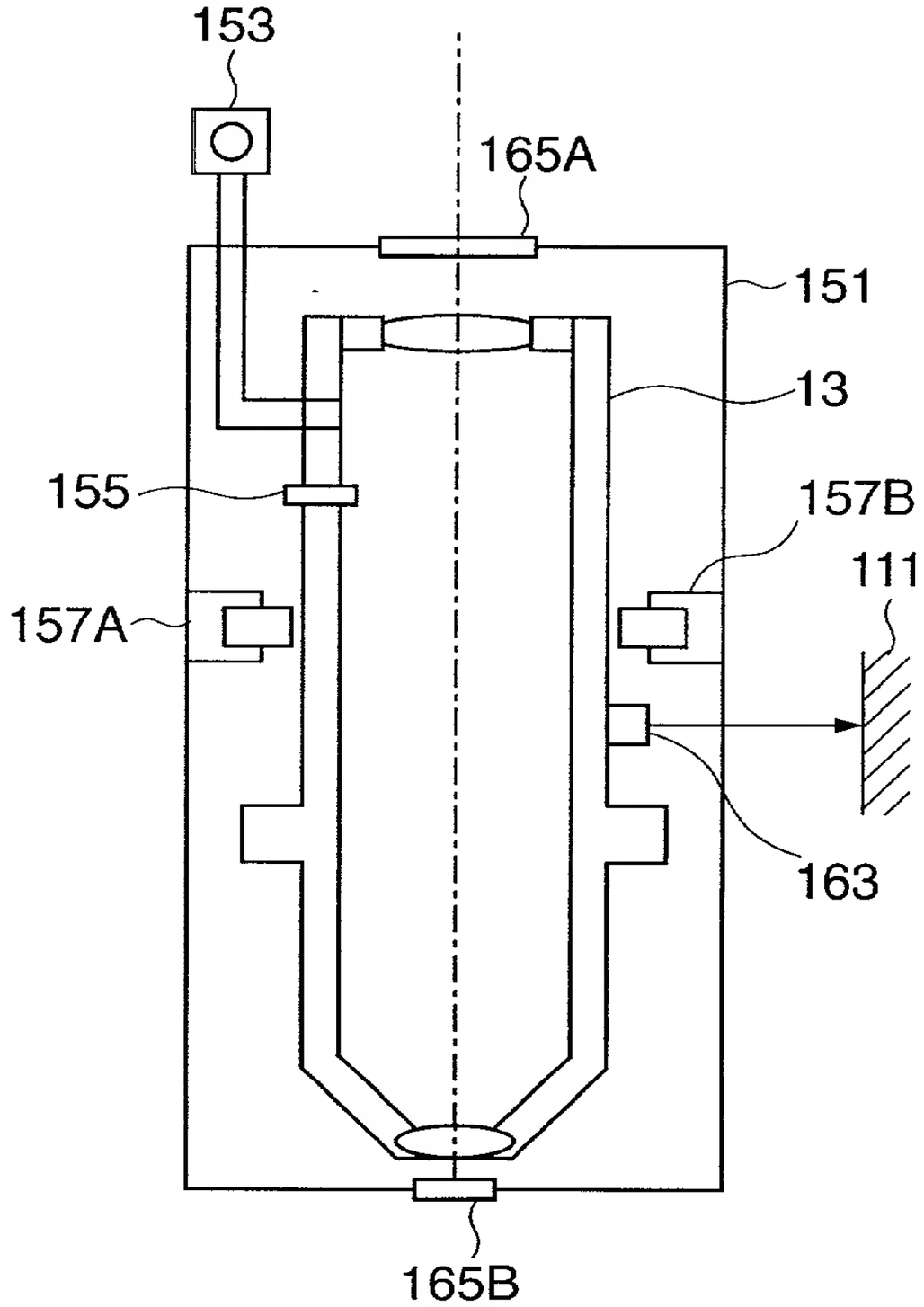


FIG. 7

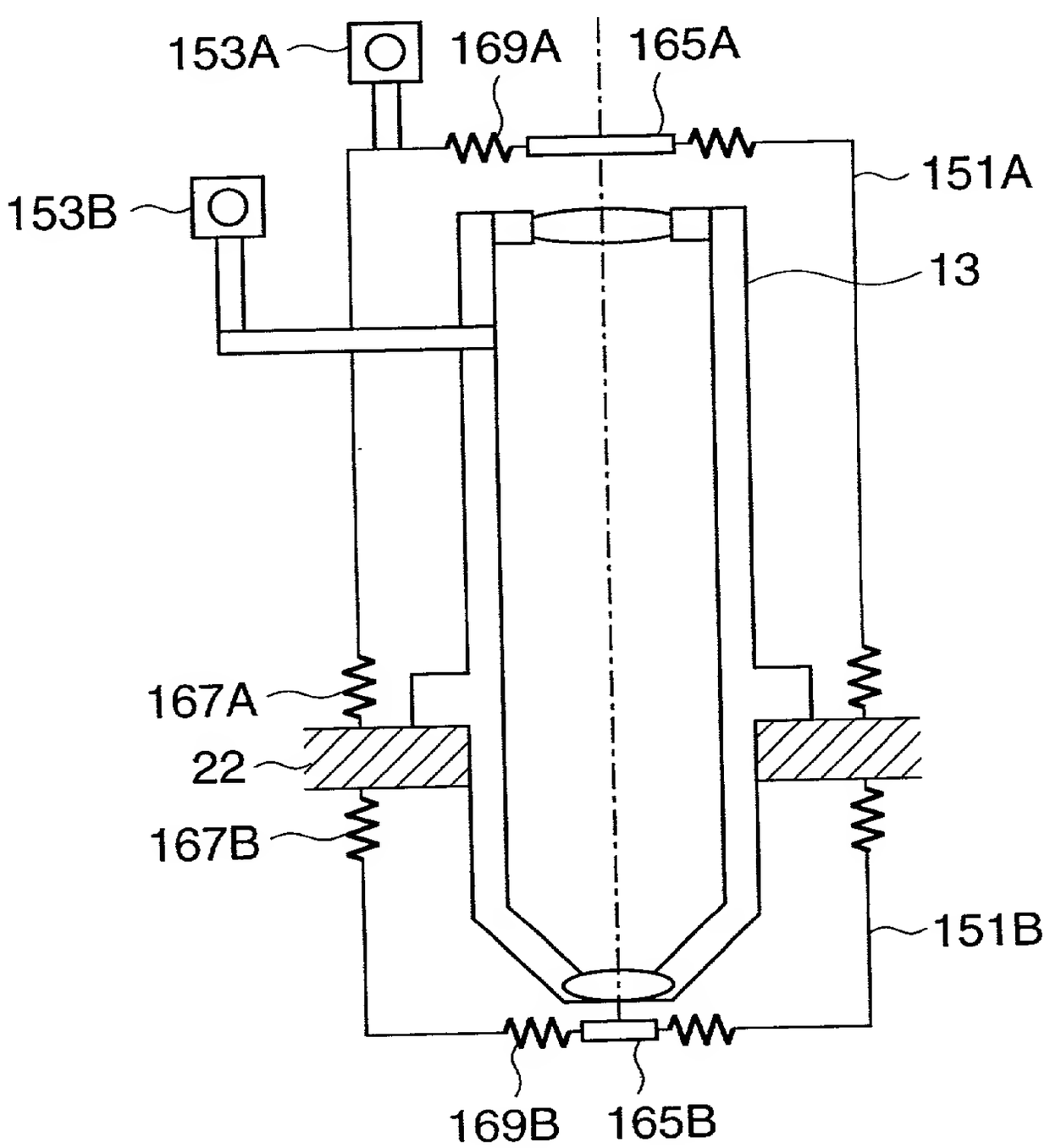


FIG. 8

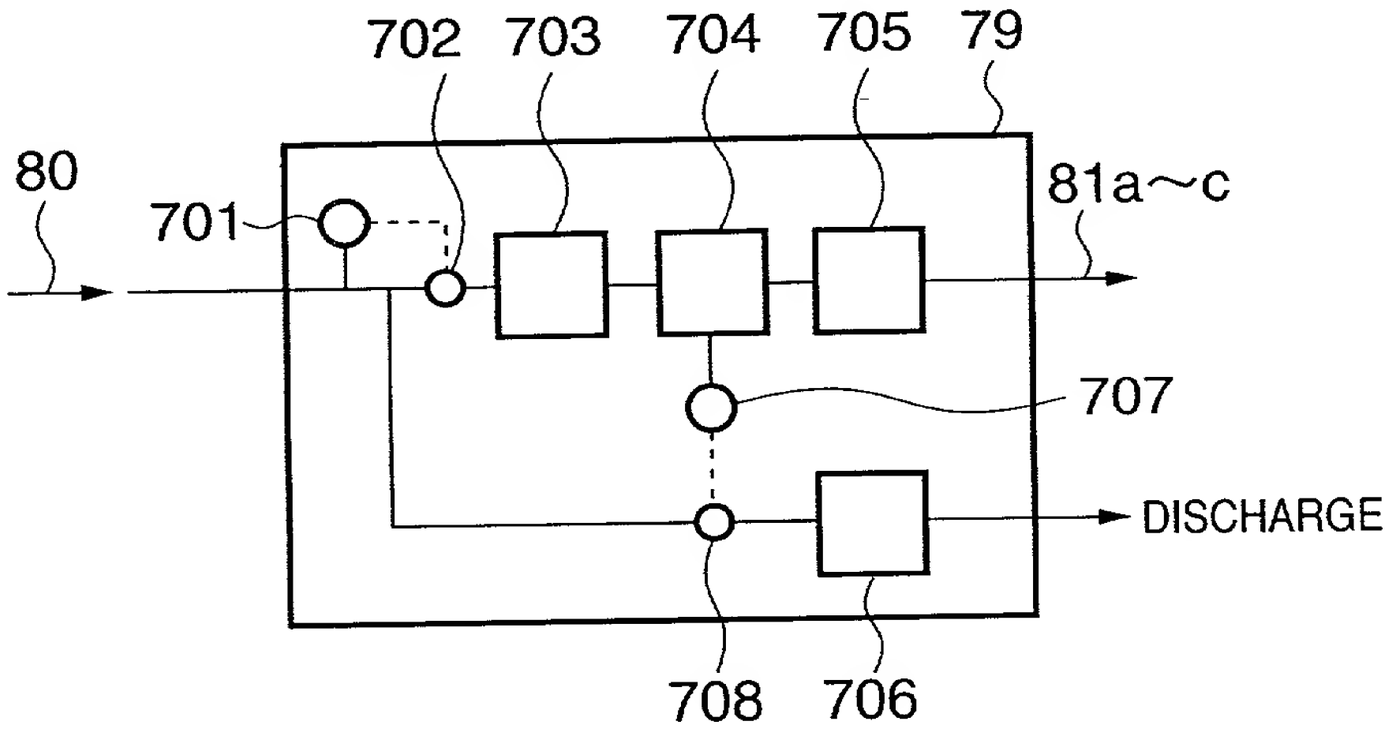


FIG. 9

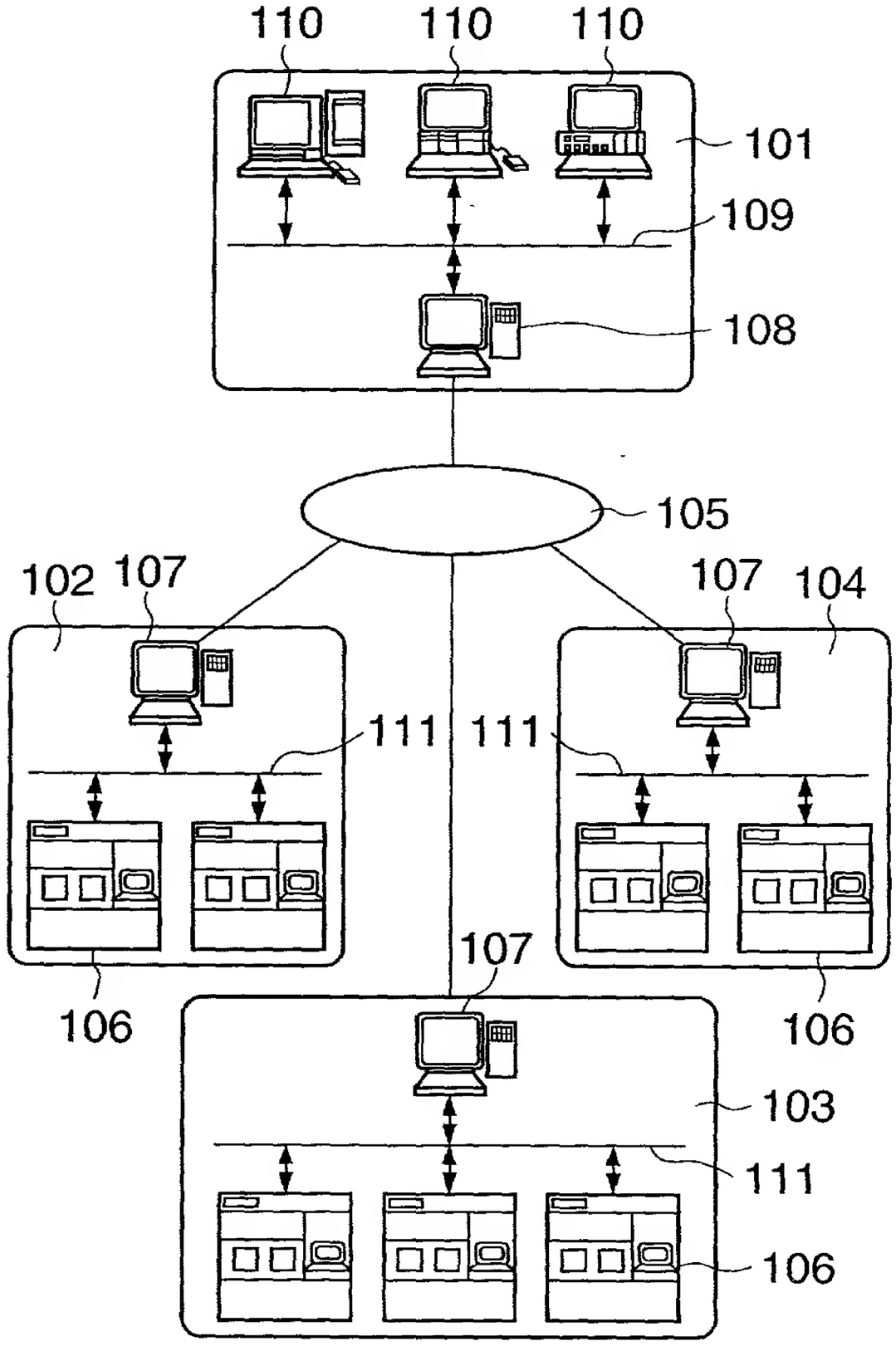

110
110
110
101
109
108
105
102
107
107
104
111
111
107
106
106
103
111
106

FIG. 10

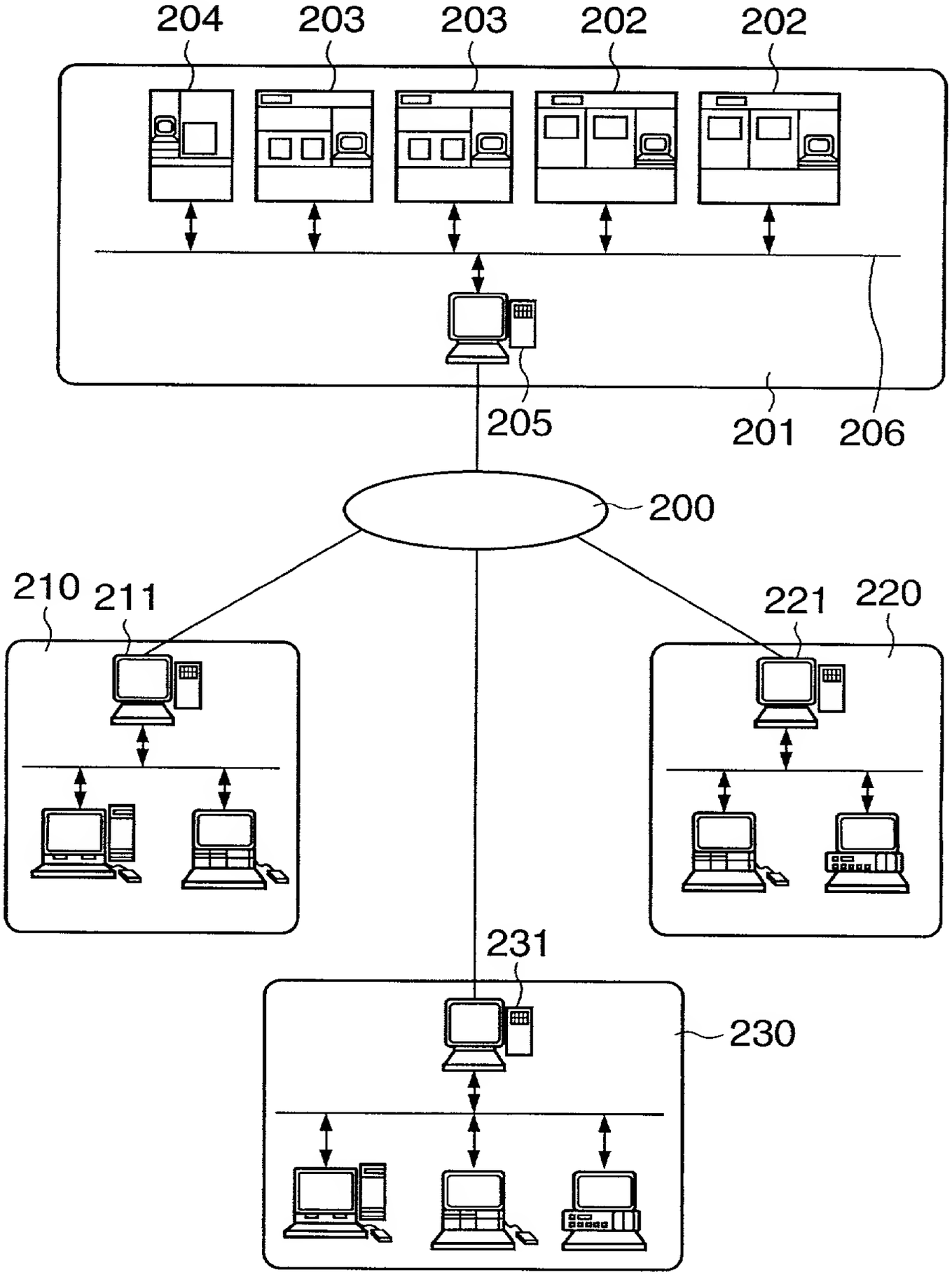


FIG. 11

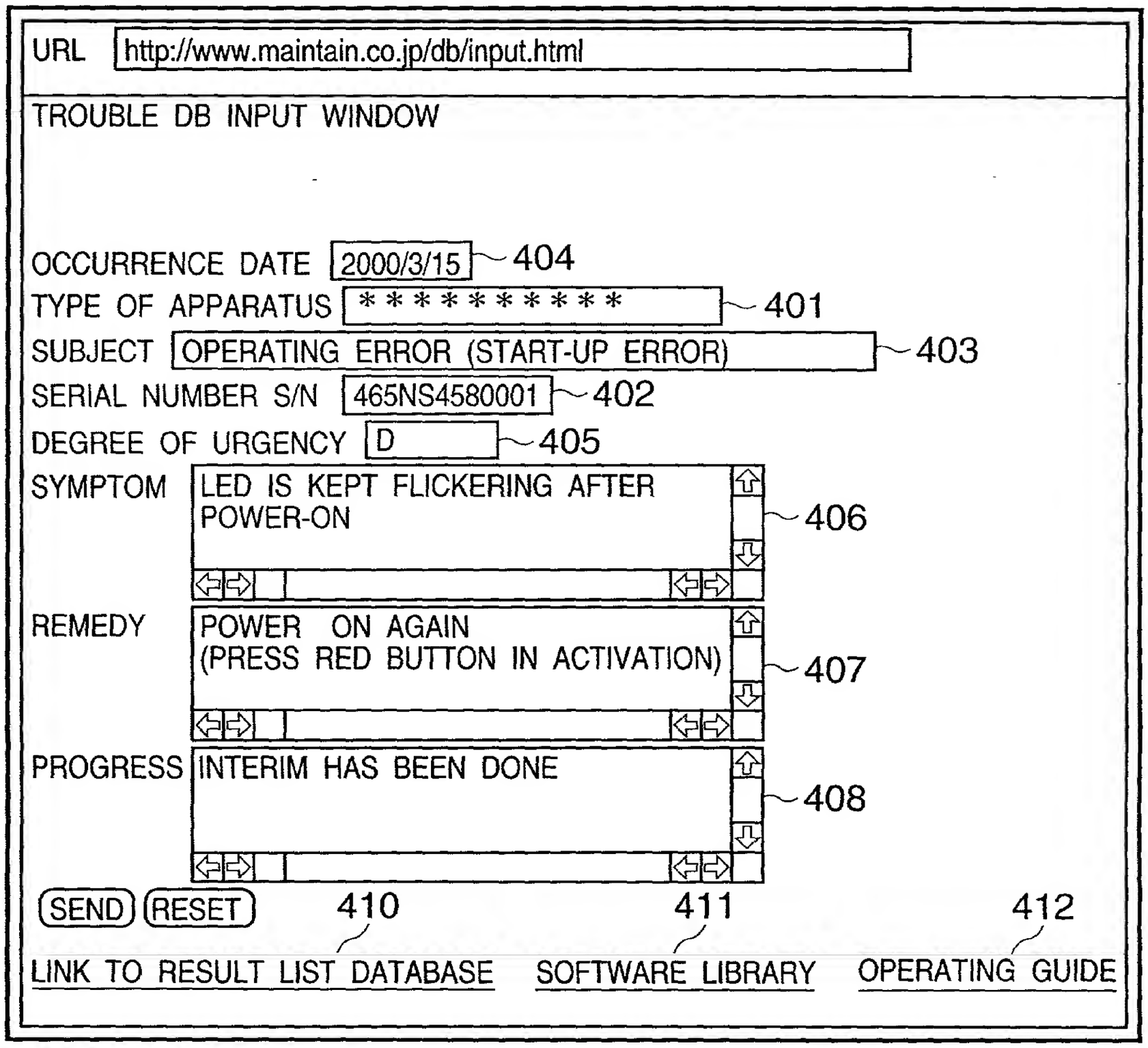

URL
http://www.maintain.co.jp/db/input.html
TROUBLE DB INPUT WINDOW
OCCURRENCE DATE
2000/3/15
404
TYPE OF APPARATUS
****
401
SUBJECT
OPERATING ERROR (START-UP ERROR)
403
SERIAL NUMBER S/N
465NS4580001
402
DEGREE OF URGENCY
D
405
SYMPTOM
LED IS KEPT FLICKERING AFTER POWER-ON
406
REMEDY
POWER ON AGAIN
(PRESS RED BUTTON IN ACTIVATION)
407
PROGRESS
INTERIM HAS BEEN DONE
408
SEND
RESET
410
411
412
LINK TO RESULT LIST DATABASE
SOFTWARE LIBRARY
OPERATING GUIDE

FIG. 12

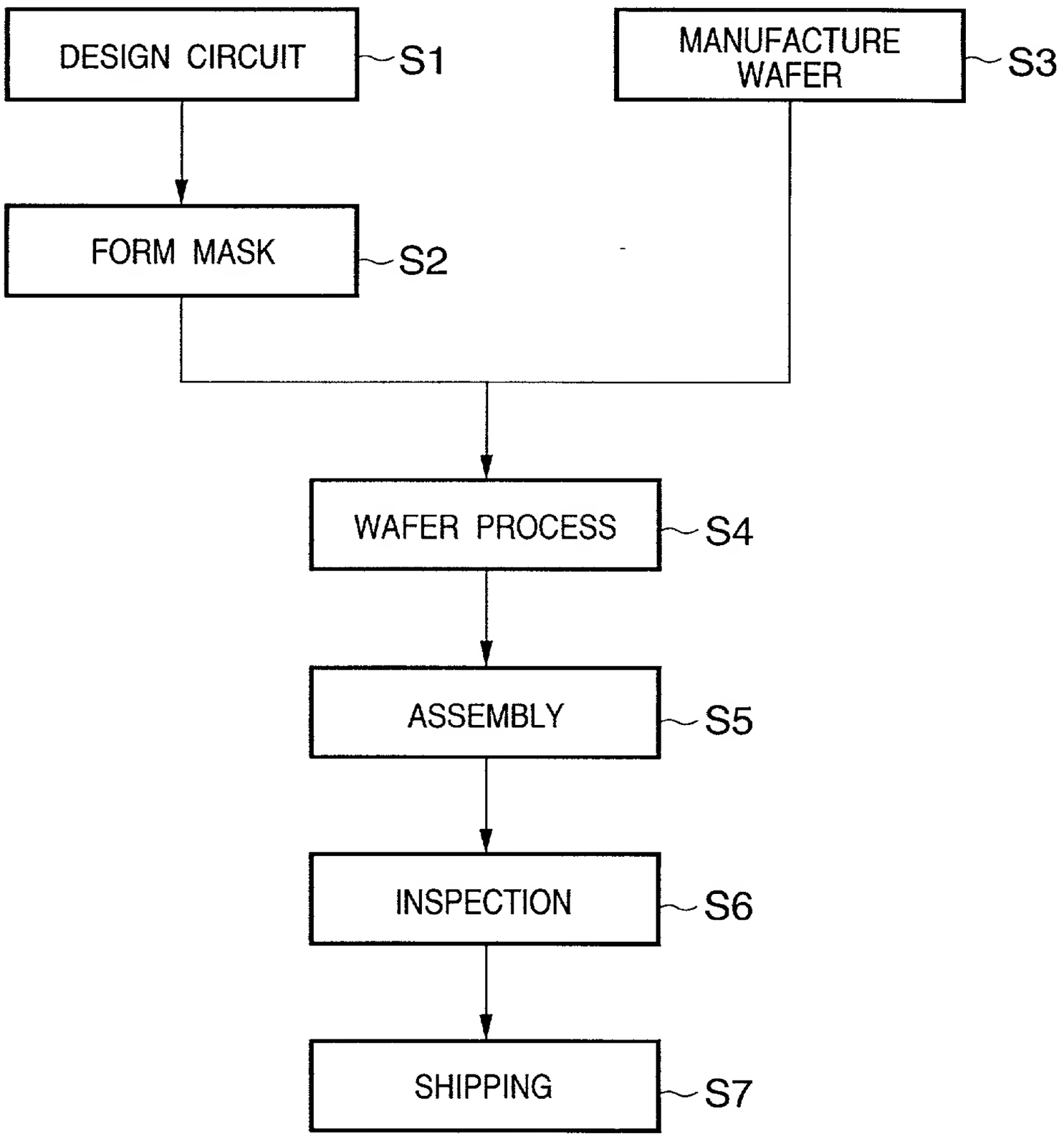

DESIGN CIRCUIT
S1
MANUFACTURE WAFER
S3
FORM MASK
S2
WAFER PROCESS
S4
ASSEMBLY
S5
INSPECTION
S6
SHIPPING
S7

FIG. 13

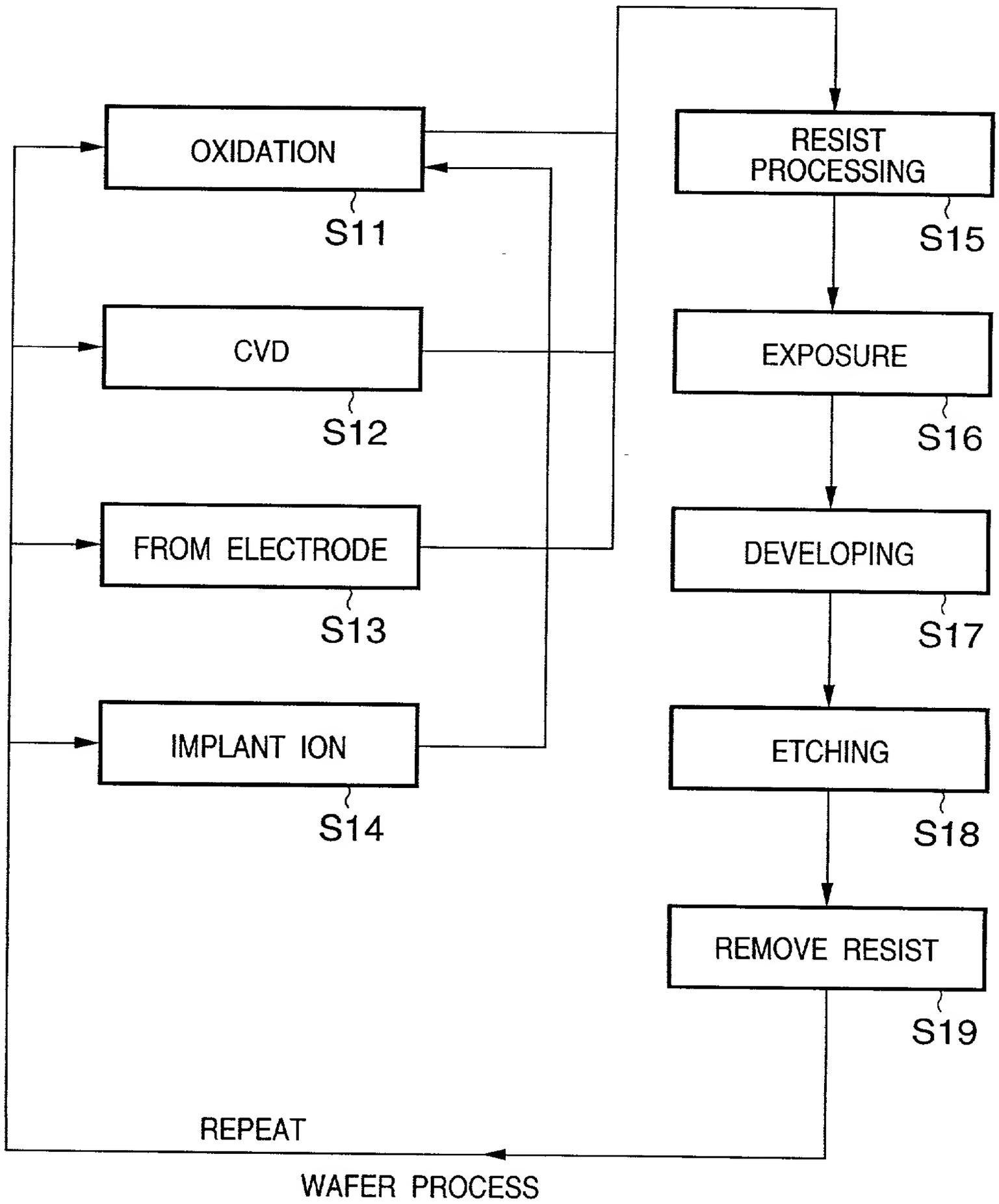
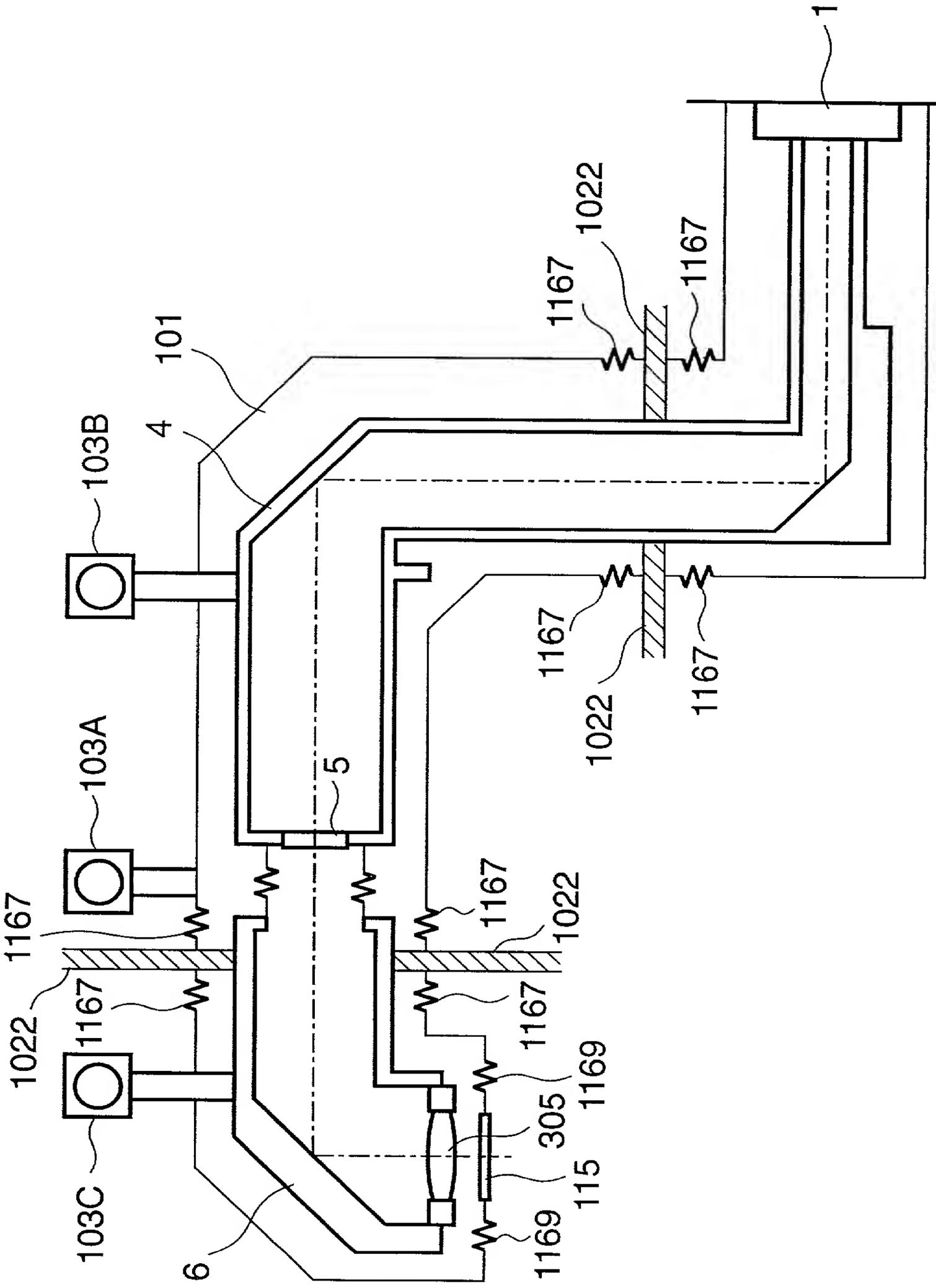

OXIDATION
S11
CVD
S12
FROM ELECTRODE
S13
IMPLANT ION
S14
RESIST PROCESSING
S15
EXPOSURE
S16
DEVELOPING
S17
ETCHING
S18
REMOVE RESIST
S19
REPEAT
WAFER PROCESS

FIG. 14


1
1022
1167
101
4
103B
1167
1022
1167
1167
1022
1167
5
103A
1167
1022
1167
1167
1022
1167
1167
1022
1167